REMARKS

This is intended as a full and complete response to the Final Office Action dated September 6, 2005, having a shortened statutory period for response set to expire on December 6, 2005. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-4, 6-31, and 33-36 remain pending in the application and are shown above. Claims 9 and 11-14 stand rejected. Claims 1-4, 6-8, 19-27, and 36 are indicated to be allowable by the Examiner. Claims 10, 15-18, 28-31, and 33-35 are objected to by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below.

Regarding the Examiner's note on the PTO form 1449 that the reference U.S. Patent Publication No. 2002160592 could not be found, Applicants note that the reference should have been to U.S. Patent Publication No. 20020160592 (*Sohn*), which is the published U.S. application for *Sohn* (U.S. Patent No. 6,475,888), which was already of record. Applicants submitted the *Sohn* publication because it was cited on the corresponding PCT search report. Applicants submit that U.S. Patent Publication No. 20020160592 (*Sohn*) is cumulative to *Sohn* (U.S. Patent No. 6,475,888).

Claims 9 and 11-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Brown, et al.* (U.S. Patent No. 6,559,017) in view of *Sohn* (U.S. Patent No. 6,475,888). The Examiner asserts that with the combination of *Brown, et al.* and *Sohn*, the layer 200 (of *Brown, et al.*) comprising amorphous carbon and nitrogen is laser annealed and the layer 200 would absorb electromagnetic radiation emitted by the laser and transfer the thermal energy created by the electromagnetic radiation to the substrate, since it is the natural consequence of the process when the layer 200 is subjected to the laser treatment. Applicants respectfully traverse the rejection.

Brown, et al. describes a structure including amorphous carbon spacers 200 that may include nitrogen on top of a substrate 120. *Brown, et al.* describes thermally annealing the structure to activate dopants in source and drains regions 130, 140 of the substrate. *Brown, et al.* teaches that the amorphous carbon material is desirable for spacers because it is easier to integrate and remove than traditional spacers (column 3, lines 57-60). *Brown, et al.* does not teach or suggest that amorphous carbon spacers that include nitrogen are layers that would absorb electromagnetic radiation emitted by a laser and transfer the created energy to an underlying substrate.

Sohn describes using an amorphous carbon layer to absorb laser electromagnetic radiation and transfer the energy created by the absorbed radiation to an underlying substrate to activate dopants therein. The only other laser absorber layer that *Sohn* mentions is a metal laser absorber layer, *e.g.*, a refractory metal thin film such as a Ti/TiN layer (column 2, lines 65-67). *Sohn* does not suggest, motivate, or provide a reasonable expectation of success for using an amorphous carbon layer that contains nitrogen to absorb electromagnetic radiation and transfer the created energy to an underlying substrate.

Thus, *Brown, et al.* and *Sohn*, individually or in combination, do not teach, suggest, or provide a reasonable expectation of success for using a layer comprising amorphous carbon and nitrogen to absorb electromagnetic radiation emitted by a laser and to transfer the created energy to an underlying substrate. Therefore, *Brown, et al.* in view of *Sohn* does not teach, show, or suggest a method of processing a substrate, comprising depositing a layer comprising amorphous carbon and nitrogen on the substrate, and then laser annealing the substrate with a laser, wherein the layer absorbs electromagnetic radiation emitted by the laser and transfers thermal energy created by the absorbed electromagnetic radiation to the substrate, as recited in claim 9. Applicants respectfully request withdrawal of the rejection of claim 9 and of claims 11-14, which depend thereon.

Claims 28, 29, 33, 34, and 35 are objected to under 37 C.F.R. § 1.75 as being a substantial duplicate of claims 1, 36, 6, 7, and 8 respectively. Applicants respectfully traverse the objection to claims 28, 29, 33, 34, and 35. Claims 28, 29, 33, 34, and 35 are product-by-process claims, while claims 1, 36, 6, 7, and 8 are process claims. The products of claims 28, 29, 33, 34, and 35 are made by the processes of claims 1, 36, 6, 7, and 8, respectively. Thus, product claims 28, 29, 33, 34, and 35 and process claims 1, 36, 6, 7, and 8 are not substantial duplicates of each other. Applicants respectfully request withdrawal of the objection to claims 28, 29, 33, 34, and 35.

Claims 10, 15, and 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Applicants submit that claims 10, 15, and 16-18 are also patentable for the reasons discussed above with respect to claim 9, upon which they depend. Applicants respectfully request withdrawal of the objection to claims 10, 15, and 16-18.

Claims 30 and 31 are objected to as being dependent upon an objected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. Applicants submit that claims 30 and 31 are patentable for the reasons discussed above with respect to claim 28, upon which they depend. Applicants respectfully request withdrawal of the objection to claims 30 and 31.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the Final Office Action. Therefore, Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this Final Office Action.

Having addressed all issues set out in the Final Office Action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,

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